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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/049,831 | 02/19/2002 | Ernesto Colizzi | Q68186 | 6328 |

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| EXAMINER | |
|---|---|
| LIOU, JONATHAN | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2663 | |

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/049,831 | COLIZZI ET AL. | |
| | Examiner | Art Unit | |
| | Jonathan Liou | 2663 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *12-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02/19/2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 02/19/2002 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

2. There are total six references submitted by the applicant; however, only one of them listed on the IDS. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12, 16-18, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chikazawa et al. (US Pat No. 5,818,816.)

Regarding claims 12 and 17, Chikazawa et al. teach a method and a network element of Multiplexed-shared Protection Ring optical fiber telecommunication network (**See Fig. 10-12, Chikazawa et al.**) comprising a plurality of nodes or network element s and a plurality of fiber spans connecting the network elements in a ring configuration , the fiber spans comprising working channels and protecting channels (**See Fig. 6, col 1-2, lines 47-6, and col 6, lines 20-40, Chikazawa et al.**), the method comprising the step of protecting information traffic installed in telecommunication network by carrying out a switch operations between working and protecting channels (**See col 3, lines 17-42, Chikazawa et al**.), switch operations being driven through protection words exchange among the nodes of said telecommunication network (**Chikazawa et al. teach the switching data, such as K1/K2 bytes, which could be interpreted as protection words as claimed, are exchanged the request and response among different communication devices. See col 7-8, lines 63-64, Chikazawa et al.**) The method further comprising the step, carried out by a node receiving a signal fail signaling on an incoming span and being in a lockout of working channel state, of sending properly coded protection words in opposite directions through the ring network so as to signal the failure to the other network elements (**Chikazawa et al. teach the switching data receiving unit 37 receives a switch request or alarm data from another communication device and output the command back to other network unit through the opposite direction as shown in Fig. 1. The switching operation is opposite the direction to the one on which the lockout of working channel is operating (See Fig.3, Chikazawa et al.) Chikazawa et al. teach receiving the failure**

**signal from other stations and terminate the connection between the failure stations, and further keep other connections for the station, which receiving the failure signal. The command would be lockout of working channel command to put into the lockout of working channel state. In addition, Chikazawa et al. teach the switching to change working channel to protection channel and vice versa while a failure in the network. For switching the transmission line to working channel while the failure occurs, it's considered as the lockout working channel state. See Fig. 1, 7,and 14-16, col 3, lines 43-59, col 7-8, lines 51-35, and col 9-10, 26-25, Chikazawa et al.**), wherein the step of sending properly coded protection words comprises the step of sending protection words requesting the node adjacent to the node that receives a signal fail signaling and transmit on the failure connection to verify the failure that has occurred and take a protecting action correspond to the failure that has occurred (**See Fig. 7,and 18-20, col 10-12, 26-43, Chikazawa et al.**)

Regarding claim 16, the similar limitation as set forth in claim 12; therefore, the same basis as applied to claim 12 are applied.

Regarding claims 18 and 21, Chikazawa et al. teach the means for interpreting properly coded protection words possibly received by any other network element, and at least one node or station have this means (**Chikazawa et al. teach means to indicate the identified coded. See col 12, lines 21-30, and Fig. 18-24, Chikazawa et al.**)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikazawa et al. (US Pat No. 5,818,816.), in view of Hata (US Pat No. 5,712,847), and further in view of Dempsey et al. (US Pat No. 5,282,200)

Regarding claims 13 and 19, Chikazawa et al. teaches sending k1/k2 data, which would be protection words as claimed, for requesting purpose (See col 8, lines 9-22, Chikazawa et al.) Chikazawa et al. does not specifically teach K1 data comprises four-bit Bridge Request Code field and all zeros combination in Bridge Request Code. Nevertheless, Hata teaches 4 bit request code in K1 data and included different codes for the request (See Fig. 10, Hata.) Chikazawa et al., in view of Hata, do not explicitly teach all zero combination request type code. However, Dempsey et al. teach K1 data includes all zero four bits (See Fig. 5c, Dempsey et al.) Dempsey et al. teach K1 data comprises total 8 bits for sonet network rings and capable reading different Network elements in the rings (See col 13-14, lines 57-12, Dempsey et al.) Hata teach K1 data comprises 8 bits and first 4 bits are the request type (See col 9, lines 55-61, Hata.) Therefore, it would have been obvious to one who has ordinary skill in the art at the time invention was made to have 4 bits request field with all zeros combination because it

would better to indicate the request for identification, such as the ID explained by Chikazawa et al. (See col 121, lines 57-67, Chikazawa et al.). In addition, Hata teaches K1/K2 data is used for fault notification and switching operation (See col 10, lines 56-62, Hata.), and Dempsey et al. teach the K1 and K2 bytes are defined for overhead operation with bidirectional ring system (col 22, lines 38-45, Dempsey et al.), which is incorporate with Chikazawa et al.'s system.

7. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikazawa et al. (US Pat No. 5,818,816.), in view of Hata (US Pat No. 5,712,847)

Regarding Claims 14 and 20, Chikazawa et al. teaches sending k1/k2 data, which would be protection words as claimed, for bridge-on signal and the switch-on signal system (See col 12, lines 15-20, Chikazawa et al.) Chikazawa et al. does not specifically teach three-bit node status field. However, Hata teaches on the K2 byte comprises three status operation bits with a bit combination (See Fig. 11, Hata.) Therefore, it would have been obvious to one who has ordinary skill in the art at the time the invention was made to have three bit Node status field with a bit combination because this would provide the information to the switching system in Chikazawa et al's structure while the failure is detected. In addition, Chikazawa et al teach switching system of identifying problem through K1/K2 bytes data (See col 8, lines 49-55, Chikazawa et al.), and Hata teaches the structure of K1 and K2 bytes (See Fig. 10-11, Hata.)

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chikazawa et al. (US Pat No. 5,818,816.), in view of Chapman (US Pat No. 5,974,027.)

Regarding claim 15, Chikazawa et al. teach sending K1/K2 data between the stations (See col 9-10, lines 33-25, Chikazawa et al.) Chikazawa et al. does not teach sending the K1/K2 data through the shorter path between the stations. However, Chapman teach sending the request data and other status data on the short path (See col 6, lines 11-20, Chapman.) Since Chapman teaches the system in the ring network of signaling and sending the protection data for the bridge and switching network (See Table 1 and col 1, lines 54-60, Chapman), it would have been obvious to one who has ordinary skill in the art at the time the invention was made to sending the protection words through the shorter path between nodes because it would give the immediate protection to the switch an other nodes. In addition, Chapman teaches that the working channel would usually be the shortest route between any connected pair of nodes and this allows protection channel to be used efficiently (See col 2, lines 24-33, Chapman.)

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (US Pat No. 5,712,847), and in view of Dempsey et al. (US Pat No. 5,282,200)

Regarding claim 22, Hata teaches K1 and K2 bytes for signaling failure in a telecommunication network and K1 includes four bit request code and K2 includes three bit node status field with all bits combination (See Fig. 10-11 and col 4-5, lines 64-20, Hata.) Hata does not specifically teach K1 comprises all zeros combination code. However, Dempsey et al. teach K1 data includes all zero four bits (See Fig. 5c, Dempsey et al.) Dempsey et al. teach K1 data comprises total 8 bits for sonet network rings and capable reading different Network elements in the rings (See col 13-14, lines 57-12, Dempsey et al.) Hata teach K1 data comprises 8 bits and first 4 bits are the

request type (See col 9, lines 55-61, Hata.) Therefore, it would have been obvious to one who has ordinary skill in the art at the time invention was made to have 4 bits request field with all zeros combination because it would better to indicate the request for identification. In addition, Dempsey et al. teach the K1 and K2 bytes are defined for overhead operation with bidirectional ring system (col 22, lines 38-45, Dempsey et al.)

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Liou whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Liou

RICKY Q. NGO 12/22/2005
SUPERVISORY PATENT EXAMINER